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EDUCATION & RESEARCH EXPERIENCE

- MRC Laboratory of Molecular Biology (Cambridge, UK)
Career Development Fellow (Lab of Jernej Ule, PhD) 2010-
• Investigating influence of genetic, developmental, and environmental variation on splicing regulation.
- Washington University School of Medicine (St. Louis, MO)
PhD in Molecular Cell Biology (Lab of Barak Cohen, PhD) 2002-2010
• GPA 3.78
• Developed high throughput methods to measure *Saccharomyces cerevisiae* growth rate to study natural selection in the laboratory.
• Developed methods to measure cell surface expression of proteins in lymphoblastoid cell lines using flow cytometry.
- Duke University (Durham, NC)
BS in Biology with concentration in Genetics 1997-2001
• GPA 3.41
• Minors in History & Chemistry
Lab Technician (Lab of Michael A Shetzline, MD, PhD) 2000-2001
• Studied mechanisms of G-protein coupled receptor signaling in the gut using cell culture and flow cytometry.
Independent Study (Lab of Richard G Fehon, PhD) 1999-2000
• Verified results of genetic screen for genes with a role in *Drosophila melanogaster* septate junction formation.

OUTREACH

- [Hamilton Township High School, OH](#)
Guest Speaker (Chemistry II) 6 January 2012
Virtual Scientist in Residence (Chemistry/Biology) Spring 2011
- [Skeptically Speaking](#)
Genetics & Evolution Adviser 2011-
- The Finch & Pea thefinchandpea.com 2010-
Founder & Author
- The Paltry Sapien thepaltrysapien.com 2011-
Contributing Author
- SheThought shethought.com 2010-
Contributing Author
- Science 2.0 science20.com 2008-2011
Featured Author

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REFERENCES

Jernej Ule, PhD
Structural Studies
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Robi Mitra, PhD
Department of Genetics
Washington University School
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PUBLICATIONS

Witten JT and J Ule. 2011. Understanding splicing regulation through RNA splicing maps. *Trends in Genetics*; March; 27(3-2): 89–97. doi: [10.1016/j.tig.2010.12.001](https://doi.org/10.1016/j.tig.2010.12.001)

Witten JT, AT Kraja, MA Province, BA Cohen. 2011. Reliability of lymphoblastoid cell lines for study of human genetic variation. Manuscript in preparation.

Witten JT, CT Chen, BA Cohen. 2007. Complex genetic changes in strains of *Saccharomyces cerevisiae* derived by selection in the laboratory. *Genetics* 177: 449-456. doi: [10.1534/genetics.107.077859](https://doi.org/10.1534/genetics.107.077859)

Tollervey JR, Z Wang, T Hortobágyi, M Kayikci, **JT Witten**, K Zarnack, TA Clark, AC Schweitzer, G Rot, T Curk, B Zupan, B Rogelj, CE Shaw, J Ule 2011. Analysis of alternative splicing associated with aging and neurodegeneration in the human brain. *Genome Research*; 21: 1572-1582. doi: [10.1101/gr.122226.111](https://doi.org/10.1101/gr.122226.111)

Staloch LJ, JK Divine, **JT Witten**, TC Simon. 2005. C/EBP and Cdx family factors regulate liver fatty acid binding protein transgene expression in the small intestinal epithelium. *Biochem Biophys Acta* 1731(3):168-178. doi: [10.1016/j.bbaexp.2005.08.014](https://doi.org/10.1016/j.bbaexp.2005.08.014)

Klopfer PH, J Huang, K Gruene, G Willis, J Gorski, S Patel, G Ramsey, N Cunningham, S Linquist, S Magaw, **J Witten**. 2002. The state of ethology. *Animal Behavior Society Newsletter* 47(3): 4-5.

LEADERSHIP EXPERIENCE

St. Louis Bombers Rugby Football Club - US Rugby Super League

Captain 2007-2008

Match Secretary 2007-2008

Orville Turgeon Award - Most Valuable Club Member 2007

Duke University Rugby Football Club

Captain 1998-2001

President 1999-2001

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AWARDS & HONORS

Best Presentation 2006
Genetics Retreat
Washington University School
of Medicine

Dean's List Fall 2000
Duke University Spring 1999
Fall 1998

PRESENTATIONS

Biology of Genomes 2009
Cold Spring Harbor, NY
Poster: *Genetic Variation in
Expression of Human Cell Surface
Markers in LCL Families*

Yeast Genetics & 2006
Molecular Biology
Princeton, NJ
Poster: *Analysis of Adaptive
Evolution in Yeast*

Genetic Analysis: Model 2006
Organisms to Human Biology
San Diego, CA
Poster: *Analysis of Adaptive
Evolution in Yeast*

Yeast Genetics & 2004
Molecular Biology
Seattle, WA
Poster: *Adaptive Evolution of the
Gene Regulatory Network*

TEACHING EXPERIENCE

Washington University in St. Louis
Teaching Assistant 2003

Plant Biology and Genetic Engineering
Course Instructor: [Barbara N. Kunkel, PhD](#)

[Crossroads College Preparatory School](#)
Substitute Biology Teacher 2009

Missouri Under-20 Rugby Select Side
Assistant Coach 2008

Washington University Rugby Football Club
Head Coach 2003-2006
Assistant Coach 2002

Duke University Women's Rugby Football Club
Assistant Coach 2002

EXPERIMENTAL SKILLS

Experienced in development of new experimental methods.

Analytical expertise in classical, population, and quantitative genetics, as well as statistics and genome-wide analysis of high throughput sequencing.

Experimental expertise with a variety of ultraviolet cross-link and immunoprecipitation of RNA, flow cytometry, luminescence plate readers, PCR, RNAi, microarray hybridization and scanning, RNA and DNA extraction, yeast transformations and deletions, yeast culture and tetrad dissection, Western blots, mammalian cell-culture (adherent and non-adherent), and mammalian cell-culture transformation.

Experience with fruit fly genetic crosses and phenotyping, electrophoretic mobility shift assays, and yeast one-hybrid analysis.

COMPUTER SKILLS

Expertise with R, Perl, and transcription profile analysis.

Experience with SAS.